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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|---------------------|------------------|
| 10/089,476 | 03/28/2002 | Gerhard Gumpoltsberger | ZAHFRI P422US | 1029 |
| 20210 | 7590 | 06/28/2004 | EXAMINER | |
| DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151 | | | ABDELNOUR, DENNIS J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3681 | |

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,476

Applicant(s)

GUMPOLTSBERGER, GERHARD

Examiner

Dennis J. Abdelnour

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3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the Request for Continued Examination (RCE) and the amendment and response included, all of which were filed June 14, 2004. Claims 13-26 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-15 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Lamers (USPN 5,890,987).

Lamers shows a continuously variable transmission in Figure 1 comprising:

a variator transmission (1,2) for continuously variable ratio adjustment and transfer of power sequentially in series along a single power flow path to a multi-step transmission (29,30) with at least one input shaft (17), an output shaft (18) and at least two forward gears and at least one reverse gear;

wherein in the multi-step transmission (29,30) the input shaft (17) and the output shaft (18) rotate in opposite directions of rotation to produce the at least two forward gears and the at least one reverse gear is produced by rotation of the input shaft (17) and the output shaft (18) in the same direction.

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In addition, the variator transmission comprises a cone pulley belt drive transmission having a variator input shaft (7) and a variator output shaft (8) exhibiting the same direction of rotation, and the output shaft of the multi-step transmission (18), is reversed in direction of rotation by a gear set (15,16).

The variator input shaft (7) and the output shaft (18) of the multi-step transmission are disposed in parallel.

The input shaft (17) and the output shaft (18) of the multi-step transmission are coaxial to each other and situated on one or both sides of a housing (not shown) of the transmission.

The multi-step transmission (29) is a planetary transmission.

A shift clutch (28) of the multi-step transmission (4) is a starting clutch.

The multi-step transmission (29,30) is a power-shift transmission.

Two forward drive ranges are shiftable and have an overlapping range

A change of the drive range as group shifting is possible, there simultaneously occurring a stepped shift in said multi-step transmission (29) and a ratio adjustment of the variator (1,2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-17 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamers in view of Ueda et al. (USPN 5,820,510).

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Lamers has been described above. Regarding claims 16-17, Lamers does not disclose the variator transmission as a one-way toroidal drive. Regarding claims 25-26, Lamers does not disclose an axial differential connected to the multi-step transmission output shaft (18).

Ueda discloses a one-way toroidal CVT coupled with a planetary transmission. Ueda also discloses an axial differential mechanism (4) in Figure 1, which is connected to a multi-step transmission output shaft through a spur gear (23).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Lamers with the one-way toroidal drive as taught by Ueda in order to improve durability of the transmission.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Lamers by including an axial differential connected through an output spur gear to the transmission output shaft in order to minimize length in the axial direction.

Response to Arguments

5. Applicant's arguments with respect to claim 13 have been considered but are moot in view of the new ground(s) of rejection.

Facsimile Transmission

6. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP

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502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 305-3597) on _____

(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis J. Abdelnour whose telephone number is (703) 305-5309. The examiner can normally be reached on Monday-Friday, 8:00-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 22, 2004

~~AA~~
dja

Charles A Marmoh 6/23/04
CHARLES A. MARMOH
SUPERVISORY PATENT EXAMINER
ART UNIT 3681